

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

Claim 1 (currently amended): A method for fabricating a semiconductor device having a stacked-gate structure, comprising the steps of:

forming a polysilicon layer overlying a substrate, insulated from the substrate by a dielectric layer;

forming a metal-flash layer overlying the polysilicon layer;

forming a tungsten nitride layer overlying the metal-flash layer;

annealing the tungsten nitride layer using nitrogen and hydrogen gases; and

forming a tungsten layer overlying the annealed tungsten nitride layer.

Claim 2 (original): The method as claimed in claim 1, further forming a cap layer overlying the tungsten layer.

Claim 3 (original): The method as claimed in claim 1, further cleaning the surface of the polysilicon layer.

Claim 4 (original): The method as claimed in claim 3, wherein the surface of the polysilicon layer is cleaned with diluted hydrofluoric acid.

Claim 5 (original): The method as claimed in claim 1, wherein the metal-flash layer is formed by self-aligned silicide (SALICIDE) process.

Claim 6 (currently amended): The method as claimed in claim 5, wherein the titanium metal-flash layer has a thickness of about 10 to 30Å.

Claim 7 (original): The method as claimed in claim 5, wherein the metal-flash layer comprises Ti, Co, or Ni.

Claim 8 (original): The method as claimed in claim 1, wherein a flow ratio of nitrogen to hydrogen is about 4:1 to 3:2.

Claim 9 (original): The method as claimed in claim 1, wherein the tungsten nitride layer is annealed at 800 to 1000°C.

Claim 10 (original): The method as claimed in claim 1, wherein the tungsten nitride layer is annealed for 50 to 100sec.

Claim 11 (currently amended): A method for fabricating a semiconductor device having a stacked-gate structure, comprising the steps of:

forming a polysilicon layer overlying a substrate, insulated from the substrate by a dielectric layer;
forming a metal-flash layer overlying the polysilicon layer;
forming a tungsten nitride layer overlying the metal-flash layer;
forming a tungsten layer overlying the tungsten nitride layer; and
annealing the tungsten layer and the tungsten nitride layer using nitrogen and hydrogen gases[[.]]; and
forming a cap layer overlying the annealed tungsten layer.

Claim 12 (canceled)

Claim 13 (original): The method as claimed in claim 11, further cleaning the surface of the polysilicon layer.

Claim 14 (original): The method as claimed in claim 13, wherein the surface of the polysilicon layer is cleaned with diluted hydrofluoric acid.

Claim 15 (original): The method as claimed in claim 11, wherein the metal-flash layer is formed by self-aligned silicide (SALICIDE) process.

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Claims 16 (currently amended): The method as claimed in claim 15, wherein the titanium metal-flash layer has a thickness of about 10 to 30Å.

Claim 17 (original): The method as claimed in claim 15, wherein the metal-flash layer comprises Ti, Co, or Ni.

Claim 18 (original): The method as claimed in claim 11, wherein a flow ratio of nitrogen to hydrogen is about 4:1 to 3:2.

Claim 19 (original): The method as claimed in claim 11, wherein the tungsten layer and the tungsten nitride layer are annealed at 800 to 1000°C.

Claim 20 (original): The method as claimed in claim 11, wherein the tungsten layer and the tungsten nitride layer are annealed for 50 to 100sec.